Appl. No.

: 09/835830

Filed

April 16, 2001

AMENDMENTS TO THE CLAIMS

1. (Previously Amended) A race car virtual reality simulator comprising:

a chassis constructed from welded steel tubes and shaped aluminum sheets;

a body of fiber-reinforced plastic;

a tube frame cockpit having a steering wheel, a floor board, and one or more seats;

a hood hinged at the front of said race car simulator;

first and second mirrors;

a computer projector mounted below or partially below the floor board of the cockpit, said projector mounted to project a computer display image onto said first mirror;

a rear projection screen;

said first mirror mounted to project the computer display image onto said second mirror and said second mirror mounted to project the computer display image onto the rear of said rear projection screen; and

a third mirror mounted to the underside of said hood, said third mirror comprising a spherical mirror to provide the viewer with an enlarged life-like image of the rear projection screen when said hood is raised, said spherical mirror comprising a thin acrylic sheet molded to the desired curvature, a mirror surface on one side of said sheet, and a sheet of foam plastic scored on one side so that the foam plastic sheet conforms to the curvature of said molded acrylic mirror, said scored foam plastic sheet bonded to the back of said acrylic mirror;

said first and second mirrors rotatably attached to said chassis and rotatable from a first position where said hood is closed to a second position where said hood is raised.

- 2. (Previously Amended) A race car virtual reality simulator comprising:
 - a chassis constructed from welded steel tubes and shaped aluminum sheets;
 - a body of fiber-reinforced plastic;
- a tube frame cockpit having a steering wheel, other automobile controls, and one or more seats;
 - a hood hinged at the front of said race car simulator;

first and second mirrors;

Appl. No.

09/835830

Filed

April 16, 2001

a computer projector mounted below or partially below the floor board of the cockpit, said projector mounted to project a computer display image onto said first mirror;

a rear projection screen;

said first mirror mounted to project the computer display image onto said second mirror and said second mirror mounted to project the computer display image onto the rear of said rear projection screen; and

a third mirror mounted to the underside of said hood, said third mirror comprising a spherical mirror to provide the viewer with an enlarged life-like image of the rear projection screen when said hood is raised.

- 3. Cancelled
- 4. Cancelled
- 5. Cancelled
- 6. (Currently Amended) The apparatus recited in claim 52, further comprising a dimensional sound system.
- 7. (Currently Amended) The apparatus recited in claim 52, said cockpit comprising a covered frame housing, and located within said covered frame housing a dimensional sound system, an infinity optics display system, and an interface for providing communication from the user to the interactive computer system.
- 8. (Previously Amended) The cockpit recited in claim 7, wherein said covered frame housing is totally enclosed in said vehicle as part of the immersive simulated experience.
- 9. (Original) The cockpit recited in claim 6, wherein the dimensional sound system is a quadraphonic sound balanced three-dimensional (3D) localization system.
- 10. (Currently Amended) The apparatus of claim <u>52</u>, further comprising a plurality of prearranged interactive displays.
- 11. (Cancelled)
- 12. (Currently Amended) The apparatus of claim 52, wherein the display system is an infinity optics display system unaffected by ambient light.

Appl. No. : 09/835830 Filed : April 16, 2001

13. (Currently Amended) The apparatus of claim <u>52</u>, wherein said plurality of interactive displays are configured with bitmaps through a digital projector.

14. (Withdrawn) A curved mirror comprising:

a thin acrylic sheet molded to the desired curvature;

a mirror surface on one side of said sheet;

a sheet of foam plastic scored on one side so that the foam plastic sheet conforms to the curvature of said molded acrylic mirror, said scored foam plastic sheet bonded to the back of said acrylic mirror to rigidly support said acrylic sheet in said desired curvature.

15. (Withdrawn) A method for making a curved mirror comprising: molding a thin acrylic sheet to the desire curvature; vacuum plating a mirror surface to one side of said acrylic sheet;

Scoring one side of a sheet of foam plastic so that said sheet will conform to the curvature of said acrylic sheet; and

bonding said sheet of foam plastic to the opposite side of said acrylic sheet.